

What is claimed is:

1 1. A single focus lens comprising, arranged along an optical axis in order from the object side:  
2 a first lens component having positive refractive power and having a convex surface on  
3 the object side;  
4 a stop;  
5 a second lens component having a meniscus shape with a concave surface near the optical  
6 axis on the object side, being made of plastic, and having at least one aspheric surface;  
7 a third lens component having a meniscus shape, positive refractive power, a convex  
8 surface on the object side near the optical axis, an aspheric object-side surface, and an aspheric  
9 image-side surface;  
10 wherein  
11 the following condition is satisfied:  
12  $0.8 < f_1 / f < 2.0$   
13 where  
14  $f_1$  is the focal length of the first lens component, and  
15  $f$  is the focal length of the entire single focus lens.

1 2. The single focus lens of claim 1, wherein the following condition is satisfied:  
2  $0.5 < (|R_2| - R_1) / (R_1 + |R_2|)$   
3 where  
4  $R_1$  is the radius of curvature of the object-side surface of the first lens component, and  
5  $R_2$  is the radius of curvature of the image-side surface of the first lens component.

1 3. The single focus lens of claim 1, wherein the following condition is satisfied:  
2  $1.5 < f_3 / f < 3.0$   
3 where  
4  $f_3$  is the focal length of the third lens component.

1 4. The single focus lens of claim 2, wherein the following condition is satisfied:

2 
$$1.5 < f_3 / f < 3.0$$

3 where

4  $f_3$  is the focal length of the third lens component.

1 5. The single focus lens of claim 1, wherein the first lens component, the second lens  
2 component, and the third lens component are arranged in that order along the optical axis from  
3 the object side without any intervening lens element.

1 6. The single focus lens of claim 5, wherein the single focus lens is formed of only three lens  
2 components.

1 7. The single focus lens of claim 6, wherein the single focus lens is formed of only three lens  
2 elements.

1 8. The single focus lens of claim 1, wherein each of the first, second, and third lens components  
2 consists of a lens element.

1 9. The single focus lens of claim 2, wherein the first lens component, the second lens  
2 component, and the third lens component are arranged in that order along the optical axis from  
3 the object side without any intervening lens element.

1 10. The single focus lens of claim 9, wherein the single focus lens is formed of only three lens  
2 components.

1 11. The single focus lens of claim 10, wherein the single focus lens is formed of only three lens  
2 elements.

1 12. The single focus lens of claim 2, wherein each of the first, second, and third lens components  
2 consists of a lens element.

1 13. The single focus lens of claim 4, wherein the first lens component, the second lens  
2 component, and the third lens component are arranged in that order along the optical axis from  
3 the object side without any intervening lens element.

1 14. The single focus lens of claim 13, wherein the single focus lens is formed of only three lens  
2 components.

1 15. The single focus lens of claim 14, wherein the single focus lens is formed of only three lens  
2 elements.

1 16. The single focus lens of claim 4, wherein each of the first, second, and third lens components  
2 consists of a lens element.

1 17. The single focus lens of claim 1, wherein:

2 both the object-side surface and the image-side surface of the second lens component are  
3 aspheric;

4 within an effective aperture range of the single focus lens, the absolute value of the  
5 negative refractive power of the object-side surface of the second lens component decreases in a  
6 direction from the optical axis toward the periphery of the second lens component and the  
7 positive refractive power of the image-side surface of the second lens component decreases in a  
8 direction from the optical axis toward the periphery of the second lens component; and

9 within an effective aperture range of the single focus lens, the positive refractive power of  
10 the object-side surface of the third lens component decreases in a direction from the optical axis  
11 toward the periphery of the third lens component.

1 18. The single focus lens of claim 4, wherein:

2 both the object-side surface and the image-side surface of the second lens component are  
3 aspheric;

4 within an effective aperture range of the single focus lens, the absolute value of the  
5 negative refractive power of the object-side surface of the second lens component decreases in a  
6 direction from the optical axis toward the periphery of the second lens component and the  
7 positive refractive power of the image-side surface of the second lens component decreases in a  
8 direction from the optical axis toward the periphery of the second lens component; and

9 within an effective aperture range of the single focus lens, the positive refractive power of  
10 the object-side surface of the third lens component decreases in a direction from the optical axis  
11 toward the periphery of the third lens component.

1 19. The single focus lens of claim 7, wherein:

2 both the object-side surface and the image-side surface of the second lens element are  
3 aspheric;

4 within an effective aperture range of the single focus lens, the absolute value of the  
5 negative refractive power of the object-side surface of the second lens element decreases in a  
6 direction from the optical axis toward the periphery of the second lens element and the positive  
7 refractive power of the image-side surface of the second lens element decreases in a direction  
8 from the optical axis toward the periphery of the second lens element; and

9 within an effective aperture range of the single focus lens, the positive refractive power of  
10 the object-side surface of the third lens element decreases in a direction from the optical axis  
11 toward the periphery of the third lens element.

1 20. The single focus lens of claim 16, wherein:

2 both the object-side surface and the image-side surface of the second lens element are  
3 aspheric;

4           within an effective aperture range of the single focus lens, the absolute value of the  
5   negative refractive power of the object-side surface of the second lens element decreases in a  
6   direction from the optical axis toward the periphery of the second lens element and the positive  
7   refractive power of the image-side surface of the second lens element decreases in a direction  
8   from the optical axis toward the periphery of the second lens element; and

9           within an effective aperture range of the single focus lens, the positive refractive power of  
10   the object-side surface of the third lens element decreases in a direction from the optical axis  
11   toward the periphery of the third lens element.